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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/445,423      | 12/10/1999  | KAZUO HATA           | 2839-0072-0         | 9913             |

22850 7590 10/07/2004

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EXAMINER

FERGUSON, LAWRENCE D

ART UNIT PAPER NUMBER

1774

DATE MAILED: 10/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application No.

09/445,423

Applicant(s)

HATA ET AL.

Examiner

Lawrence D. Ferguson

Art Unit

1774

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 21 September 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY** [check either a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☒ The proposed amendment(s) will not be entered because:
- (a) ☒ they raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ they raise the issue of new matter (see Note below);
- (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet.

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
4. ☒ Newly proposed or amended claim(s) 7 would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☒ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_.

Claim(s) objected to: 7.

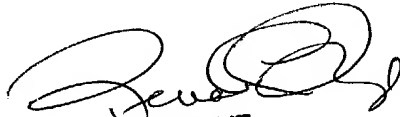
Claim(s) rejected: 5-6 and 9-12.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

8. ☐ The drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_.
10. ☐ Other: \_\_\_\_\_.

Continuation of 2. NOTE: Applicant seeks to narrow the scope of the invention by adding new claim 14 and further limiting the claimed invention to include "a temperature that is 50 to 300 C lower than a sintering temperature of the second green sheet".

Continuation of 5. does NOT place the application in condition for allowance because: Applicant argues the cited prior art fails to suggest "sandwiching a first green sheet between spacers; baking the first green sheet while the first green sheet is sandwiched between the spacers; and producing a ceramic sheet...wherein each of the spacers is a calcined sheet." Takeuchi discloses a method for making a ceramic green sheet comprising ceramic particles having a spherical diameter of 0.01-0.5 $\mu$ m (column 2, lines 1-20 and column 3, lines 34-40) where the ceramic green sheet may be laminated with other green sheets and fired (baked) simultaneously (column 6, lines 8-10) provided a green sheet sandwiched between two green sheets, which are calcined (column 8, lines 19-21). Applicant further argues Takeuchi teaches a particle having a high average degree of aggregation is prone to not only a defect on the surface of a ceramic substrate but also a defect such as a scratch. For this reason, Takeuchi discloses The present invention is characterized in that an average degree of aggregation of ceramic particles is controlled. The average degree of aggregation is 10 or less, preferably 7 or less, more preferably 5 or less. When the average degree of aggregation is too high, a ceramic green sheet has an uneven thickness, deformation, cracks (column 3, lines 60-65). Because Takeuchi teaches a low aggregation, it is obvious to one of ordinary skill in the art that the particle having a low average degree of aggregation is prone to not cause defects on the surface of a ceramic surface..

  
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